Abstract

Title:
Description of selection fitness criteria for selected national teams and dependence of such criteria on performance in a single scull

Aim:
The main focus of this work is to describe current fitness selection criteria to national teams and ascertain the connection between these criteria and performance in a single scull.

Methods:
The structure of this thesis is descriptive. The practical part presents the relationship between selected fitness criteria obtained from 11 participants. The relationship is expressed as a correlation coefficient. Twelve values were acquired from each participant, sorted into 3 separate categories.

- Tests of maximum power (1RM)
- Endurance tests
- Rowing ergometr tests

Results:
It was found that rowing federations select competitors primarily through ergometer testing, namely the tests for 2 km and 5 km or 6 km.
Sculling performance is mainly dependent on individual’s endurance capabilities with a correlation coefficient of $r = 0.62$ and on dead lift with correlation coefficient of $r = 0.64$. Power output per unit weight during endurance tests turned out to be irrelevant. So did squatting with added weight ($r = 0.00$) and 1500m running ($r = 0.03$). Ergometer tests which are characteristic for rowing showed medium correlation ($r = 0.58$).

Conclusion:
None of the tests proved significant correlation to the sculling performance.

Key words:
Performance diagnostic, rowing performance, National Team, Testing, Fitness capabilities, high performance sport